Measurement for Improvement News

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Measurement for Improvement: Trends

1. Patients → Populations → Communities
2. Clinical Outcomes → Personalized Outcomes
3. Costs → Value
4. Clinical Data or Research Data → Clinical Data and Research Data and Collaboratories
Measurement at 3 Levels

Communities

Populations

Patients

Clinical & Personal Metrics

Communities

Populations

Patients

Clinical Status …
- Mortality
- Morbidity
- Signs & Sx
- Biomarkers

My personal …
- Goals & Problems
- Function
- Quality of Life
- Length of Life
Costs to Value

Per Capita Costs

Experience

Outcomes

Outcomes + Experience – Harm

___________________________

Per Capita Costs

PROMs

• Patient Reported Outcome Measures
• A glut of good measures
• All star generic measures
  – EQ5D
  – SF/VR-12 & SF/VR-36
  – PROMIS
Clinical Data & Research Data

Collaboratories …

A curious word … Journal Science

Science 2.0

Ben Shneiderman

Traditional scientific methods need to be expanded to deal with systems meet technological innovation.

Science, 7 March 2008
Putting it all together

“Gene, would you be interested in importing the Swedish Rheumatology Quality Registry into the US?”

Clinical, Improvement & Research Data

Feed Forward

Acute Care Management
Chronic Care Management
Functional Restoration
Palliative Care

Feedback

- Improvement registry
- Public reports website
- SPORT & research

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Dashboard generated from patient-reported data is used by clinician to guide care for the patient: **same page care**

**Functional Status**

**Red Flags**

**Risk Factors**

**Disease Status**

**History & Symptoms**

**Patient Perception of Outcomes**

**“Practicing without it …feels like I am flying blind”**

**SPORT NIH Trial**
- 13 Centers
- 3 spine conditions
- Feed forward PROMs
- Prospective controlled trial
- 6 years of follow up
- 50+ publications

**Nov 26 2006**

**JAMA**

**SITES**

**The NEW ENGLAND JOURNAL of MEDICINE**

**Surgical versus Nonsurgical Treatment for Lumbar Degenerative Spondylolisthesis**

**May 31 2007**
Moving research results back to patient care … risk calculator used at point of care for Shared Decision Making.
Stenosis Outcomes

@ 2 Years

QALYs
1.54
1.37
Cost per QALY gained
$77,600

@ 4 Years

QALYs
2.94
2.72
Cost per QALY gained
$59,400

Degenerative Spondylolisthesis Outcomes

@ 2 Years

QALYs
1.55
1.33
Cost per QALY gained
$115,600

@ 4 Years

QALYs
3.00
2.66
Cost per QALY gained
$64,300

“All models are wrong, some are useful”
George Box

Coproduction Model:
Linking People, Information, and Knowledge Generation
for Better Health & Service Value

Learning Health System
For More Effective Action by Patients, Providers, and Researchers

Shared Information Environment
- Personal Health Records
- Patient Facilitated Networks
- Registries
- Collaborative Improvement Networks
- Electronic Health Records

Optimal Health and High Value Care for Patients and Populations

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Benefits to Many

• Patients & families: better data for self management
• Clinicians & care teams: better data for decision making & outcomes tracking & benchmarking & learning health system becomes reality
• Researchers: better data for restrospective & prospective research
• Payers & policy makers: data for value based payments and transparent data for learning and improvement
Potential CF Value Metrics: Thoughts?

**Functional & QoL**
- CF Specific
- Physical
- Mental
- Role & Productivity

**Clinical**
- FEV1
- BMI
- Survival
- Symptoms
- Risk Factors

**Experience**
- Access
- Coordination
- Decision Quality
- Self-Care Performance
- Perceived health benefit

**Costs**
- Direct per Capita Expenditures
- Utilization of Services
- Indirect costs: Healthy Days, WPAI

Black = Already able to collect by CFF in Registry or Patient Experience Survey
Blue = Not yet collected but needed for RWJF Grant Project: Patient reported health & costs

Discussion